

NATIONAL AIR INTELLIGENCE CENTER



A BRIEF INTRODUCTION TO THE ELECTRONIC ENGINEERING DEPARTMENT
OF THE BEIJING UNIVERSITY OF SCIENCE AND ENGINEERING



19950512 076

DTIC QUALITY IMPROVED 8

Approved for public release;
Distribution unlimited.

HUMAN TRANSLATION

NAIC-ID(RS)T-0176-95

26 April 1995

MICROFICHE NR: 950000260

A BRIEF INTRODUCTION TO THE ELECTRONIC ENGINEERING DEPARTMENT
OF THE BEIJING UNIVERSITY OF SCIENCE AND ENGINEERING

English pages: 4

Source: Beijing Ligong Daxue Xueboa, Vol. 12, Nr. 3, 1992;
pp. 72

Country of origin: China

Translated by: Edward Suter

Requester: NAIC/TAER/Lt Amy Welch

Approved for public release; Distribution unlimited.

Accession For	
NTIS	GRA&I
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/ _____	
Availability Codes	
Dist	Avail and/or Special
R-1	

THIS TRANSLATION IS A RENDITION OF THE ORIGINAL
FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITO-
RIAL COMMENT STATEMENTS OR THEORIES ADVO-
CATED OR IMPLIED ARE THOSE OF THE SOURCE AND
DO NOT NECESSARILY REFLECT THE POSITION OR
OPINION OF THE NATIONAL AIR INTELLIGENCE CENTER.

PREPARED BY:

TRANSLATION SERVICES
NATIONAL AIR INTELLIGENCE CENTER
WPAFB, OHIO

GRAPHICS DISCLAIMER

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available.

A BRIEF INTRODUCTION TO THE ELECTRONIC ENGINEERING DEPARTMENT
OF THE BEIJING UNIVERSITY OF SCIENCE AND ENGINEERING

The electronic engineering department of the Beijing University of Science and Engineering was established in 1952. It was among the first units in China to be engaged in specialized studies and scientific research on radar and remote control telemetry. In 1987, its graduate school of radar electronics science was founded. In 1992, jointly with the China Electronics Science Institute, the department founded a graduate school of electronics technology. This department has a strong contingent of teachers. It has 12 professors, 54 assistant professors, and three young and middle-aged experts who have made contributions at the national level. Over the past 30 years, the department has not only trained a number of highly talented engineering technology personnel, it has also transferred [direct translation -- "graduated" would make more sense here] more than 5000 undergraduate students. Today, there are more than 500 undergraduate students and 100 graduate students in this department. This department has also had many great successes in scientific research. In the short period since 1981, it has won five national prizes for inventions, 19 major national and ministerial-level technological advancement awards, and issued more than 400 academic theses in academic publications and at conferences at home and abroad.

The department offers specialized studies in the four areas of radio technology, communications engineering, microelectronic

circuits and systems, electromagnetic fields, and microwave technology; five master's degree programs in circuits and systems, communications and electronic systems, signal and information processing, electromagnetic fields and microwave technology, and microelectronic technology; three doctoral degree programs in communications and electronic systems, signal and information processing, and electromagnetic fields and microwave technology; and one floating post-doctoral post [?]. Communications and electronic systems was judged to be a national priority discipline; electromagnetic fields and microwave technology was judged by the Ministry of Mechanical Engineering to be a ministerial priority discipline; and a national-level signal gathering and processing laboratory was established.

This department has obtained a great deal of high-level scientific research success. Its research on radar systems began relatively early in China. These systems include pulse compression systems, single pulse tracking systems, phased array systems, et cetera. The department has participated in preliminary research and research on major national projects, such as the 110 satellite-tracking radar project, 7010 long distance early warning radar, the 116 project, et cetera. It has also carried out research and development of the 582 low-altitude height-finding radar, small 860 cannon-aiming radar, and the Red Arrow-73 (Hongjian-73) remote control telemetry system. A task force was formed to be engaged in radar system research and system design. The 582 radar won a national invention prize, improvements to the small 860 radar won

a National Science Conference prize, and the Red Arrow-73 telemetry system won a major fourth-place award for national defense technology improvement. In the fields of anti-passive radar interference, radar signal processing, and other technological research, the modulus blended CCD moving target radar detection system won a second-place national invention prize, and its use spread to four different kinds of radar, thus causing a gain of ten million yuan in economic efficiency. The moving target radar display system won four national invention prizes and three important national defense science and engineering committee technology improvement awards, and its use spread to six kinds of radar. The department made great progress in preliminary research on anti-tank missile image-guidance guidance heads. The model 1 television surveillance burglar alarm system developed by this department won a major third place prize from the National Defense Science and Engineering Committee. The model 2 version of this system has already received a national patent, and its use is widespread in public security systems. The department has had successes in scientific research of radar and guidance in the field of antenna and microwave technology over the past several decades. The most improved components of the small 860 radar, which won a National Science Conference prize, were the antenna and feeder cable. The department was the first unit in China to develop phased array antenna and slow-wave antennas. The decimeter wave television antenna series is the result of joint research between this department and the number 761 factory of the primary electron unit [note -- "primary electron unit" is my best guess. It could

also be the Ministry of Atomic Electronics, but I found no such ministry]. This antenna series won a major second place technology improvement prize from the Ministry of Electronics. At present, the department has a full set of application software for ultralow *fuban* [word not found -- separated, *fu* means "pay" or "commit," and *ban* means "lobe" or "valve"] antenna design, and this department is in a leading position within China in this area. This software allowed the number 38 and 39 offices under the Ministry of Mechanical Engineering to improve the grade of their export radar. The department has attained a certain level of success in the fields of airborne radar antennas and microwave imaging.

Over the past decade, the electronic engineering department has actively participated in academic foreign exchange activities. It has had close contact with universities, scientific research organizations, and academic groups of between ten and twenty nations and regions. It has signed interdepartmental agreements with the departments of several well-known universities, invited famous scholars to come and lecture, and sent over 30 noted teachers to several nations to give lectures, participate in academic exchanges and joint research, engage in advanced studies, jointly train doctoral students, make visits for observation and study, and other activities.

Under the present favorable conditions of reform and openness, this department will make even greater contributions to China's buildup.

DISTRIBUTION LIST

DISTRIBUTION DIRECT TO RECIPIENT

ORGANIZATION	MICROFICHE
B085 DIA/RTS-2FI	1
C509 BALL0C509 BALLISTIC RES LAB	1
C510 R&T LABS/AVEADCOM	1
C513 ARRADCOM	1
C535 AVRADCOM/TSARCOM	1
C539 TRASANA	1
Q592 FSTC	4
Q619 MSIC REDSTONE	1
Q008 NTIC	1
Q043 AFMIC-IS	1
E051 HQ USAF/INET	1
E404 AEDC/DOF	1
E408 AFWL	1
E410 AFDTC/IN	1
E429 SD/IND	1
P005 DOE/ISA/DDI	1
P050 CIA/OCR/ADD/SD	2
1051 AFIT/LDE	1
P090 NSA/CDB	1
2206 FSL	1

Microfiche Nbr: FTD95C000260
NAIC-ID(RS) T-0176-95